

# Expanding Telecommunications Access In Indian Country



Federal Communications Commission  
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# Table of Contents

<b>I. Introduction.....</b>	<b>3</b>
<b>II. The FCC: An Overview.....</b>	<b>4</b>
Introduction	
Organization	
Bureaus	
Priorities of FCC Chairman Michael K. Powell	
<b>III. Telecommunications Technology Choices.....</b>	<b>6</b>
Introduction	
Brief Description of Choices	
Key Considerations of Technology Choices	
Regulatory	
Geography	
Cost	
<b>IV. FCC Telecom Programs that Promote Connectivity.....</b>	<b>8</b>
Indian Telecom Initiatives (ITI)	
Universal Service Program	
Tribal Lands Bidding Credit (TLBC)	
<b>V. Conclusion.....</b>	<b>12</b>
<b>Appendix A:</b> Excerpt from the FCC Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes.....	<b>13</b>
<b>Appendix B:</b> Glossary of Telecommunications Terms.....	<b>15</b>

**Cover Photo:**

Northern Plains painted deerhide shirt, ca. 1850. Collected ca. 1850 at Fort Laramie, Wyoming. Height 83.75 cm. Photo by Katherine Fogden. Courtesy, National Museum of the American Indian, Smithsonian Institution.

## Introduction

Recognizing that the telephone penetration rate on many tribal lands falls far below the national average, the Federal Communications Commission (FCC) has taken a series of steps, through regulatory action and tribal outreach, to address the lack of telecommunications deployment and subscribership on tribal lands nationwide. This guide was developed as part of the FCC's ongoing Indian Telecommunications Initiatives (ITI) outreach effort and is consistent with the desire to establish government-to-government working relationships with American Indian tribes and Alaska Native villages.

The material that follows provides an overview of the FCC, the types of available telecommunications technology and FCC programs that are aimed at promoting telecommunications services in Indian Country. This information should prove helpful as a basic guide and starting point for tribal governments and organizations that are considering the deployment or expansion of telecommunications services in Indian Country.

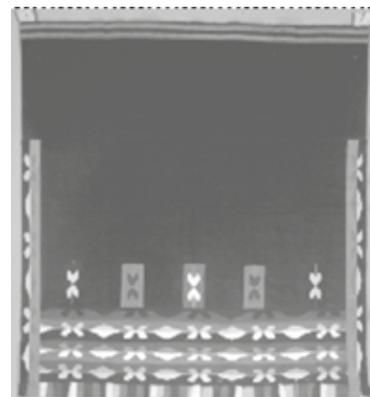
The FCC recognizes the rights of tribal governments to set their own communications priorities and goals for the welfare of their membership. The FCC does not endorse or favor any particular telecommunications technology or system over any other; instead the decision as to which telecommunications technology and support programs are most appropriate should be based upon the particular needs of each community. Some of the key considerations that should be weighed in making such a decision also are set out in this guide. An excerpt from the FCC Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes and a glossary of telecommunications terms are provided at the end of the material along with a list of FCC contact offices. The Consumer & Governmental Affairs Bureau, through its Intergovernmental Affairs Office, is available to provide assistance to tribal governments and organizations in matters relating to the FCC.

## The FCC: An Overview

### *Introduction*

The FCC is an independent United States government agency directly responsible to Congress. The FCC was established by the Communications Act of 1934.

The Commission regulates interstate and international radio, television, wire, satellite and cable communications. The FCC's jurisdiction covers the 50 states, the District of Columbia, and U.S. territories.



#### **Photo:**

Osage woman's ribbonwork dance robe. Oklahoma. Length 115 cm. Photo by David Heald. Courtesy, National Museum of the American Indian, Smithsonian Institution.

## Organization

The FCC is directed by five Commissioners, appointed by the President and confirmed by the Senate for 5-year terms, except when filling an open term. The President designates one of the Commissioners to serve as Chairperson. Only three Commissioners may be members of the same political party. None of them may have a financial interest in any Commission-related business. The Commissioners supervise all FCC activities, delegating responsibilities to staff bureaus and offices.

## Bureaus

The Commission is organized by function. There are six operating bureaus and ten staff offices. The bureaus carry out the mission of the FCC through public activities and contacts. The bureaus' responsibilities include: processing applications for licenses and other filings; analyzing complaints; conducting investigations; developing and implementing regulatory programs; and taking part in hearings. The staff offices primarily provide internal support and services to the bureaus.

- **Consumer & Governmental Affairs Bureau (CGB):** Educates and informs consumers about telecommunications goods and services and engages their input to help guide the work of the Commission. CGB coordinates telecommunications policy efforts with industry and other governmental agencies – federal, tribal, state and local – in serving the public interest. Through the Bureau's intergovernmental affairs function, it strives to ensure a close working relationship between FCC and federal, state, local and tribal governments in telecommunications consumer-related matters. This Bureau also coordinates consumer, rural and disability related issues.
- **Enforcement Bureau:** Enforces the Communications Act, as well as the Commission's rules, orders and authorizations.
- **International Bureau:** Represents the Commission in satellite and international telecommunications matters.
- **Media Bureau:** Regulates AM and FM radio, television broadcast stations, as well as Multipoint Distribution (*i.e.*, cable and satellite systems) and Instructional Television Fixed Services.
- **Wireless Telecommunications Bureau:** Handles all FCC domestic wireless telecommunications programs and policies, except those involving satellite communications or broadcasting. Wireless communications services include cellular, paging, personal communications services, public safety, and other commercial and private radio services. The Bureau also regulates the use of spectrum to fulfill the communications needs of consumers; businesses; local, state, and tribal governments; public safety service providers; commercial aircraft; and ship operators.

- **Wireline Competition Bureau:** Regulates telephone companies that provide interstate, and under certain circumstances intrastate, telecommunications services to the public through the use of wire-based transmission facilities (*i.e.*, corded/cordless telephones).

### ***Priorities of FCC Chairman Michael K. Powell***

Chairman Powell has identified six policy initiatives for the FCC. These initiatives, as described below, are priorities of the Commission and are being integrated into the FCC's various programs, including those that affect and support the deployment of telecommunications in Indian Country.

- **Broadband Deployment:** Establish regulatory policies that promote competition, innovation, and investment in broadband services and facilities while monitoring progress toward the deployment of broadband services in the United States and abroad.
- **Efficient Use of Spectrum:** Encourage the highest and best use of spectrum domestically and internationally in order to encourage the growth and rapid adoption of new technologies.
- **Media Ownership:** Revise media regulations so that timely development and delivery of new technologies is encouraged, media ownership rules promote competition and diversity in a comprehensive, legally sustainable manner, and the migration to digital modes of delivery is facilitated.
- **Homeland Security:** Provide leadership in evaluating and strengthening the Nation's communications infrastructure, in ensuring rapid restoration of that infrastructure in the event of disruption, and in ensuring that essential public health and safety personnel have effective communications services available to them in emergency situations.
- **Encourage Competition:** Support the Nation's economy by ensuring there is a comprehensive and competitive framework within which the communications revolution can continue so that all consumers can make meaningful choices among and have equal access to communications services.
- **Modernize the FCC:** Emphasize performance and results through excellent management, develop and retain independent mission-critical expertise, and align the FCC with dynamic and converging communications markets.

## Telecommunications Technology Choices

### *Introduction*

The FCC recognizes that the challenges associated with gaining access to telecommunications service are unique to every tribe. Different tribes are in different stages of economic development, particularly where telecommunications access is concerned, and each tribe may face its own particular impediments to telecommunications deployment. Consequently, choosing the telecommunications system best suited for a particular tribe will vary depending on regulatory, geographic, and market considerations. The following includes a brief overview of the key telecommunications technology choices that are available – wireline, wireless, satellite and cable – and certain key considerations that may influence the choice of a telecommunications system.

### *Brief Description of Choices*

- **Wireline:** The traditional telephone system is a wireline system. Voice and data are transmitted using a transmission medium such as copper wire, coaxial or fiber optic cable. The type of transmission medium determines how much information and what kinds of service can be provided. Systems consist of telephones, wire connections, and switching machines.
- **Wireless:** Land-based wireless technology transmits voice and data using radio waves, or electromagnetic spectrum. Wireless networks may transmit to a receiver that is mobile, such as a cell phone, or to a stationary receiver, such as an antenna at an office. In addition to wireless transmitters, receivers, and repeaters, a mobile wireless system may include switching centers, and interconnection to the public switched telephone network.
- **Satellite:** A satellite is a radio relay station that orbits the earth or that is positioned in space over a fixed point on the earth. Satellites are used to transmit services such as telephone, television, and data signals originated by common carriers, broadcasters, and distributors of cable TV programming. A typical system used for voice transmission may consist of mobile subscriber transceivers or telephones; satellites that interconnect with the transceivers; and gateway ground stations that manage the network and interconnect with other networks.
- **Cable:** This technology is used to distribute TV signals, either through coaxial, optical fiber cable, or through satellite-delivery. Cable operators may use their own poles, microwave link, place their cable underground, or use transmission facilities or rights-of-way owned or controlled by a utility service or municipality. Some cable systems offer a full-range of telecommunications services, including high-speed internet access and local telephone service.

## ***Key Considerations of Technology Choices***

In choosing a telecommunications system, considerations other than pure technical capability also must be evaluated. In addition to the specific types of telecommunications services and applications desired, regulatory standards, geography and cost considerations may well determine the telecommunications system that is ultimately selected. These three key considerations -- regulatory, geography, and cost -- are briefly discussed below.

- **Regulatory:** The regulatory scheme that applies to a particular telecommunications system differs depending on the technology involved. For example, in general, the FCC has jurisdiction over long distance, wireless and satellite services, while state governments have jurisdiction over wireline local telephone service. The FCC and local franchising authorities are responsible for enforcing a variety of cable television regulations. A franchising authority is the local municipal, county or other government organization that regulates certain aspects of the cable television industry at the state or local level.

In addition to telecommunications-related regulations, applicable federal, state, and tribal environmental and historic preservation laws and regulations must be followed before, during and after constructing facilities, including wireless transmission towers, in Indian Country. Placing telecommunications infrastructure in remote, historic, ecologically threatened or sovereign areas is an issue of concern because the construction may impact environmental or preservation interests. Compliance with federal property laws and policies regarding tribal trust and individually-held trust and restricted lands, such as the federal process of obtaining a right-of-way, is a prerequisite to such actions taken in Indian Country. Compliance with other laws and regulations which may have been issued by a tribal government also must be met before telecommunications-related construction and services are provided on tribal land.

- **Geography:** Geography can be a significant consideration. For example, wireless may work better in certain environments, such as where there are adequate transmission towers and fewer transmission obstructions, while satellite systems work well in geographically isolated areas where impassable terrain may make service via wireless or wireline economically challenging.
- **Cost:** Cost is a key factor. Wireline may be a cost prohibitive alternative when there are geographic challenges, limited infrastructure, and minimal economic resources. Wireless service may provide a viable technological alternative for those tribal members residing in the most remote areas of the reservation that cannot afford the cost of expensive line extensions. Satellite technology represents a potentially cost-effective means to serve communities with low penetration rates, especially those in remote areas. Satellites have large coverage areas and in many cases can reach an entire region, thereby spreading the costs of deployment across a number of communities.

## **FCC Telecom Programs that Promote Connectivity**

In a series of steps undertaken since 1998, the FCC, in consultation with tribal leaders and representatives, and other government agency officials, has sought to address concerns about barriers to telecommunications service deployment and subscribership in Indian Country, ranging from geographic isolation, lack of information, and economic obstacles.

The FCC has held formal field hearings on the quality of telephone service on reservations; the costs of delivering services to remote areas with low population densities; and relevant jurisdictional and tribal sovereignty issues. The FCC also initiated two comprehensive rulemakings that targeted eliminating impediments to telephone service on tribal lands. As a result of these rulemakings new wireless and wireline regulations aimed at increasing telephone service in Indian Country were created. These programs are highlighted below. Along with these new regulations, the FCC formally reaffirmed its recognition of the principles of tribal sovereignty and the federal trust responsibility. The FCC recognized its own general trust relationship with, and responsibility to, federally-recognized tribes through a formal statement of policy. The Commission also recognized the rights of Indian Tribal governments to set their own communications priorities and goals for the welfare of their membership.

In recent years, the Commission held the Indian Telecom Training Initiative (ITTI) 2000 conference, a seminal national tribal training conference on all aspects of telecommunications deployment on tribal lands. The telecommunications industry also benefited from the knowledge of how to do business in Indian Country during the ITTI 2001 Industry Conference.

Presently, the FCC administers or oversees various programs under three broad categories that promote connectivity in Indian Country. The categories include the Indian Telecommunications Initiatives (ITI), which is an umbrella term used to describe the Commission's programs aimed at expanding telecommunications access in Indian country; the Universal Service Programs; and the Tribal Lands Bidding Credits program.

### ***Indian Telecom Initiatives (ITI)***

ITI encompasses all of the FCC's outreach efforts in Indian Country and has three principal goals:

- To increase the telephone penetration rate.
- To increase telecommunications infrastructure deployment.
- To inform consumers on tribal lands nationwide about federal programs that provide discounts for telecommunications services.



To reach these goals, the FCC will participate or engage in four types of IT related activities:

- Regional workshops in Indian Country.  
*Workshops* will provide “how to” information on telecommunications services and telecommunications infrastructure development.
- Conferences and other events that address American Indian telecom issues.
- One-on-one meetings between tribal representatives and FCC staff.
- Distribution of educational materials through tribes and tribal organizations.

### ***Universal Service Program***

The Universal Service Fund programs are critical to promoting connectivity in Indian Country because they make available financial incentives to institutions that provide telecommunications and information services. In addition, universal service funds make services more affordable for consumers who might otherwise be unable to purchase such services.

- There are four principal universal service programs:
  - High-Cost Program:* Provides support for telephone companies providing service in high-cost areas of the country.
  - Schools & Libraries Program:* Provides support to assist schools and libraries in purchasing telecommunications and information services.
  - Rural Health Care Program:* Provides support to assist rural health care providers in purchasing telecommunications.
  - Low-Income Program:* Provides support to enable low-income consumers to obtain and retain telephone service.
- Program Eligibility: Programs are open to all eligible applicants, including American Indian tribes, Indian businesses, and tribal consumers.
- Universal Service Fund: Monies to support programs come from the Federal Universal Service Fund, which is supported by contributions from telecommunications carriers.
- Eligible Telecommunications Carriers: The Universal Service Administrative Company (USAC) both collects contributions and disburses funds for carriers. USAC pays out money only to carriers designated “eligible telecommunications carriers,” or “ETCs.” The law requires a carrier to meet certain criteria to be designated an ETC in order to receive universal service support.

To obtain ETC certification, a carrier must demonstrate it offers the services supported by Federal universal service support mechanisms. ETCs are also required to publicize the supported services, including the availability of Link-Up and Lifeline support, in a manner designed to reach those consumers who would likely qualify for the discounts.

In 2000, the FCC streamlined the process for ETC designation of carriers providing service on tribal lands. The FCC has jurisdiction to designate ETCs if a carrier is not subject to state jurisdiction, such as certain carriers on tribal lands. The law requires states to make these designations for carriers over which they have jurisdiction.

As a practical matter, most local exchange carriers, and certain wireless carriers, are ETCs.

- The Low-Income Program. This program is made up of two components. As part of its continuing effort to help all Americans, including Native Americans, gain access to telephone service, the FCC has launched its “Get Connected: Afford-A-Phone” Program to increase participation in these two components of the Low-Income Program.

*Link-Up America Program:* This program helps to defray the cost of initial telephone service installation fees, up to \$100 per household on tribal land.

*Lifeline Assistance Program:* This program allows eligible consumers to save money on their basic monthly telephone service fee. On non-tribal lands, the total discount is comprised of a federal support amount, that may, depending on related state lifeline programs, include additional matching state support. Thus, the amount of lifeline support varies from state-to-state.

*General Eligibility:* Eligibility for discounts varies by state. Generally, any consumer (a person or household) who participates in one or more of the following federal programs may be eligible for the Low-Income Program:

- Low-Income Home Energy Assistance Program (LIHEAP), or any official Home Energy Assistance Program;
- Federal Public Housing Assistance, or Section 8;
- Medicaid;
- Food Stamps; or,
- Supplemental Security Income (SSI).

*Eligibility for Residents of Tribal Lands:* In addition to participation in the federal programs listed above, eligibility may be established by residents of Tribal lands if they participate in any of the following programs:

- Bureau of Indian Affairs General Assistance;
- Tribally-Administered Temporary Assistance for Needy Families (TTANF);
- Head Start (those meeting its income qualifying standard); or,
- National School Lunch Program's Free Lunch Program.

*Lifeline and Link-Up discounts* are applied to the phone service, whether wireline or wireless, at the principal place of residence. The support for both programs is paid directly to the telephone carrier.

### ***Tribal Lands Bidding Credit (TLBC)***

In addition to the support provided through the Universal Service programs, the FCC also has taken steps to encourage the deployment of wireless telephone service on tribal lands through the FCC spectrum auctions process. Since 1994, the FCC has conducted auctions of licenses for spectrum. An auctions process is the method used by the Commission to license spectrum to the highest bidder. Spectrum auctions are open to companies and individuals that file an application, submit an upfront payment, and are qualified by the FCC according to their financial solvency and ownership interests.

In 2000, the FCC adopted a Tribal Lands Bidding Credits rule, which provides for discounts to be applied to winning (high) bids in FCC auctions, as an incentive for carriers to provide service on tribal lands. In order to ensure that credits are targeted to those tribal communities with the greatest need for access to telecommunications service, the tribal lands bidding credit is limited to tribal areas with a wireline telephone penetration rate equal to or less than 70 percent. The penetration rate is determined by the actual percentage of households within the particular tribal lands area that subscribes to wireline telephone service.

A carrier seeking tribal lands bidding credits must obtain written certification from a tribal government authorizing it to construct facilities and provide service on the tribal area. The tribal government must certify that:

- It will allow the carrier to site facilities and provide service on its tribal land(s) in accordance with FCC rules;
- It has not and will not enter into an exclusive contract with the carrier precluding entry by other carriers and will not unreasonably discriminate against any carrier; and
- Its tribal land qualifies by having a telephone penetration rate at or below 70 percent.



A carrier that receives tribal lands bidding credits has three years to construct and operate a system that covers at least 75 percent of the population of the tribal area, and must file a notification of construction with the FCC. If the notification is not filed or the construction requirement is not met, the carrier must repay the bidding credit amount plus interest.

## Conclusion

The FCC's vision is to improve the quality of life for residents of tribal lands by helping tribes achieve access to the modern telecommunications services that are so critical to the health, safety, security and successful economic development of all communities. Through the combined efforts of the FCC, tribes, tribal organizations and other interested stakeholders, we increase our chances of finding workable solutions to meet the telecommunications needs of American Indian and Alaska Native communities. The FCC welcomes input as we strive to reach our mutual goals.



## APPENDIX A

The following is an excerpt from the FCC Policy Statement entitled “**Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes**” adopted by the Federal Communications Commission (FCC or Commission) on June 8, 2000. The full text of this statement may be accessed through the FCC Web site at [www.fcc.gov/indians/](http://www.fcc.gov/indians/). Footnote citations, which are included in the official document, are not reflected in this excerpt.

### **REAFFIRMATION OF PRINCIPLES OF TRIBAL SOVEREIGNTY AND THE FEDERAL TRUST RESPONSIBILITY**

The Commission recognizes the unique legal relationship that exists between the federal government and Indian Tribal governments, as reflected in the Constitution of the United States, treaties, federal statutes, Executive orders, and numerous court decisions. As domestic dependent nations, Indian Tribes exercise inherent sovereign powers over their members and territory. The federal government has a federal trust relationship with Indian Tribes, and this historic trust relationship requires the federal government to adhere to certain fiduciary standards in its dealings with Indian Tribes. In this regard, the Commission recognizes that the federal government has a longstanding policy of promoting tribal self-sufficiency and economic development as embodied in various federal statutes.

The Commission also recognizes that the Federally Recognized Indian Tribe List Act of 1994, makes a finding that the federal government has a trust responsibility to and a government-to-government relationship with recognized tribes.

Therefore, as an independent agency of the federal government, the Commission recognizes its own general trust relationship with, and responsibility to, federally-recognized Indian Tribes. The Commission also recognizes the rights of Indian Tribal governments to set their own communications priorities and goals for the welfare of their membership.

The Commission hereby reaffirms its commitment to the following goals and principles:

1. The Commission will endeavor to work with Indian Tribes on a government-to-government basis consistent with the principles of Tribal self-governance to ensure, through its regulations and policy initiatives, and consistent with Section 1 of the Communications Act of 1934, that Indian Tribes have adequate access to communications services.
2. The Commission, in accordance with the federal government’s trust responsibility, and to the extent practicable, will consult with Tribal governments prior to implementing any regulatory action or policy that will significantly or uniquely affect Tribal governments, their land and resources.
3. The Commission will strive to develop working relationships with Tribal governments, and will endeavor to identify innovative mechanisms to facilitate Tribal consultation in agency regulatory processes that uniquely affect telecommunications compliance activities, radio spectrum policies, and other telecommunications service-related issues on Tribal lands.

4. The Commission will endeavor to streamline its administrative process and procedures to remove undue burdens that its decisions and actions place on Indian Tribes. As administrative and organizational impediments that limit the FCC's ability to work with Indian Tribes, consistent with this Policy Statement, are identified, the Commission will seek to remove those impediments to the extent authorized by law.

5. The Commission will assist Indian Tribes in complying with Federal communications statutes and regulations.

6. The Commission will seek to identify and establish procedures and mechanisms to educate Commission staff about Tribal governments and Tribal cultures, sovereignty rights, Indian law, and Tribal communications needs.

7. The Commission will work cooperatively with other Federal departments and agencies, Tribal, state and local governments to further the goals of this policy and to address communications problems, such as low penetration rates and poor quality services on reservations, and other problems of mutual concern.

8. The Commission will welcome submissions from Tribal governments and other concerned parties as to other actions the Commission might take to further the goals and principles presented herein.

9. The Commission will incorporate these Indian policy goals into its ongoing and long-term planning and management activities, including its policy proposals, management accountability system and ongoing policy development processes.

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*For the full text of the source of the above excerpt visit the FCC's Web site:*

[www.fcc.gov/indians/](http://www.fcc.gov/indians/)

## APPENDIX B

### GLOSSARY OF TELECOMMUNICATIONS TERMS

**Access Charge** – A fee charged subscribers or other telephone companies by a local exchange carrier for the use of its local exchange networks.

**Analog Signal** – A signaling method that uses continuous changes in the amplitude or frequency of a radio transmission to convey information.

**Bandwidth** – The capacity of a telecom line to carry signals. The necessary bandwidth is the amount of spectrum required to transmit the signal without distortion or loss of information. FCC rules require suppression of the signal outside the band to prevent interference.

**Broadband** – A descriptive term for evolving digital technologies that provide consumers a signal switched facility offering integrated access to voice, high-speed data service, video-demand services, and interactive delivery services.

**Calling Party Pays** – A billing method in which a wireless phone caller pays only for making calls and not for receiving them. The standard American billing system requires wireless phone customers to pay for all calls made and received on a wireless phone.

**Cellular Technology** – This term, often used for all wireless phones regardless of the technology they use, derives from cellular base stations that receive and transmit calls. Both cellular and PCS phones use cellular technology.

**Closed Captioning** – A service for persons with hearing disabilities that translates television program dialog into written words on the television screen.

**Commercial Leased Access** – Manner through which independent video producers can access cable capacity for a fee.

**Common Carrier** – In the telecommunications arena, the term used to describe a telephone company.

**Communications Assistant** – A person who facilitates telephone conversation between text telephone users, users of sign language or individuals with speech disabilities through a Telecommunications Relay Service (TRS). This service allows a person with hearing or speech disabilities to communicate with anyone else via telephone at no additional cost.

**Community Antenna Television (CATV)** – A service through which subscribers pay to have local television stations and additional programs brought into their homes from an antenna via a coaxial cable.

**Cramming** – A practice in which customers are billed for enhanced features such as voice-mail, caller-ID and call-waiting that they have not ordered.

**Dial-Around** – Long distance services that require consumers to dial a long distance provider's access code (like a "10-10" number) before dialing a long distance number to bypass or "dial around" the consumer's chosen long distance carrier in order to get a better rate.

**Digital Television** – A new technology for transmitting and receiving broadcast television signals. DTV provides clearer resolution and improved sound quality.

**Direct Broadcast Satellite (DBS/DISH)** – A high-powered satellite that transmits or re-transmits signals that are intended for direct reception by the public. The signal is transmitted to a small earth station or dish (usually the size of an 18-inch pizza pan) mounted on homes or other buildings.

**E-mail** – Also called electronic mail, refers to messages sent over the Internet. E-mail can be sent and received via newer types of wireless phones, generally with a specific e-mail account.

**Enhanced Service Providers** – A for-profit business that offers to transmit voice and data messages and simultaneously adds value to the messages it transmits. Examples include telephone answering services, alarm/security companies and transaction processing companies.

**En Banc** – An informal meeting held by the FCC to hear presentations on specific topics by diverse parties. The Commissioners, or other officials, question presenters and use their comments in considering FCC rules and policies on the subject matter that is under consideration.

**Frequency Modulation (FM)** – A signaling method that varies the carrier frequency in proportion to the amplitude of the modulating signal.

**Global Positioning System (GPS)** – A US satellite system that lets those on the ground, on the water or in the air determine their position with extreme accuracy using GPS receivers.

**High Definition Television (HDTV)** – An improved television system which provides approximately twice the vertical and horizontal resolution of existing television standards. It also provides audio quality approaching that of compact discs.

**Interactive Video Data Service (IVDS)** – A communication system, operating over a short distance, that allows nearly instantaneous two-way responses by using a hand-held device at a fixed location. Viewer participation in game shows, distance learning and e-mail on computer networks are examples.

**Instructional Television Fixed Service (ITFS)** – A service provided by one or more fixed microwave stations operated by an educational organization and used to transmit instructional information to fixed locations.

**Landline** – Traditional wired phone service.

**Land Mobile Service** – A public or private radio service providing two-way communication, paging and radio signaling on land.

**Low Power FM Radio (LPFM)** – A broadcast service that permits the licensing of 50-100 watt FM radio stations within a service radius of up to 3.5 miles and 1-10 watt FM radio stations within a service radius of 1 to 2 miles.

**Low Power Television (LPTV)** – A broadcast service that permits program origination, subscription service or both via low powered television translators. LPTV service includes the existing translator service and operates on a secondary basis to regular television stations. Transmitter output is limited to 1,000 watts for normal VHF stations and 100 watts when a VHF operation is on an allocated channel.

**Must-Carry (Retransmission)** – A 1992 Cable Act term requiring a cable system to carry signals of both commercial and noncommercial television broadcast stations that are “local” to the area served by the cable system.

**Network** – Any connection of two or more computers that enables them to communicate. Networks may include transmission devices, servers, cables, routers and satellites. The phone network is the total system for transmitting phone messages.

**Number Portability** – A term used to describe the capability of individuals, businesses and organizations to retain their existing telephone number(s) — and the same quality of service — when switching to a new local telecommunications service provider.

**Open Video Systems** – An alternative method to provide cable-like video service to subscribers.

**Operator Service Provider (OSP)** – A common carrier that provides services from public phones, including payphones and those in hotels/motels.

**Paging System** – A one-way mobile radio service where a user carries a small, light-weight miniature radio receiver capable of responding to coded signals. These devices, called “pagers,” emit an audible signal, vibrate or do both when activated by an incoming message.

**Personal Communications Service (PCS)** – Any of several types of wireless, voice and/or data communications systems, typically incorporating digital technology. PCS licenses are most often used to provide services similar to advanced cellular mobile or paging services. However, PCS can also be used to provide other wireless communications services, including services that allow people to place and receive communications while away from their home or office, as well as wireless communications to homes, office buildings and other fixed locations.

**Presubscribed Interexchange Carrier Charge (PICC)** – The charge the local exchange company assesses the long distance company when a consumer picks it as his or her long distance carrier.

**Roaming** – The use of a wireless phone outside of the “home” service area defined by a service provider. Higher per-minute rates are usually charged for calls made or received while roaming. Long distance rates and a daily access fee may also apply.

**Satellite** – A radio relay station that orbits the earth. A complete satellite communications system also includes earth stations that communicate with each other via the satellite. The satellite receives a signal transmitted by an originating earth station and retransmits that signal to the destination earth station(s). Satellites are used to transmit telephone, television, and data signals originated by common carriers, broadcasters, and distributors of cable TV program material.

**Satellite Home Viewer Improvement Act of 1999 (SHVIA)** – An Act modifying the Satellite Home Viewer Act of 1988, SHVIA permits satellite companies to provide local broadcast TV signals to all subscribers who reside in the local TV station’s market. SHVIA also permits satellite companies to provide “distant” network broadcast stations to eligible satellite subscribers.

**Satellite Master Antenna Television (SMATV)** – A satellite dish system used to deliver signals to multiple dwelling units (e.g., apartment buildings and trailer parks.)

**Scanner** – A radio receiver that moves across a wide range of radio frequencies and allows audiences to listen to any of the frequencies.

**Service Plan** – The rate plan you select when choosing a wireless phone service. A service plan typically consists of a monthly base rate for access to the system and a fixed amount of minutes per month.

**Service Provider** – A telecommunications provider that owns circuit switching equipment.

**Slamming** – The term used to describe what occurs when a customer's long distance service is switched from one long distance company to another without the customer's permission. Such unauthorized switching violates FCC rules.

**Spectrum** – The range of electromagnetic radio frequencies used in the transmission of sound, data, and television.

**Subscriber Line Charge (SLC)** – A monthly fee paid by telephone subscribers that is used to compensate the local telephone company for part of the cost of installation and maintenance of the telephone wire, poles and other facilities that link your home to the telephone network. These wires, poles and other facilities are referred to as the "local loop." The SLC is one component of access charges.

**Tariff** – The documents filed by a carrier describing their services and the payments to be charged for such services.

**Telecommunications Relay Service (TRS)** – A free service that enables people with TTYs, individuals who use sign language and people who have speech disabilities to use telecommunications services by having a third party transmit and translate the call.

**Telephony** – The word used to describe the science of transmitting voice over a telecommunications network.

**TTY** – A type of machine that allows people with hearing or speech disabilities to communicate over the phone using a keyboard and a viewing screen. It is sometimes called a TDD.

**Unbundling** – The term used to describe the access provided by local exchange carriers so that other service providers can buy or lease portions of its network elements, such as interconnection loops, to serve subscribers.

**Universal Service** – The financial mechanism which helps compensate telephone companies or other communications entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular and high costs areas, and to public institutions. Companies, not consumers, are required by law to contribute to this fund. The law does not prohibit companies from passing this charge on to customers.

**Very High Frequency (VHF)** – The part of the radio spectrum from 30 to 300 megahertz, which includes TV Channels 2-13, the FM broadcast band and some marine, aviation and land mobile services.

**Video Description** – An audio narration for television viewers who are blind or visually disabled that consists of verbal descriptions of key visual elements in a television program, such as settings and actions not reflected in the dialog. Narrations are inserted into the program's natural pauses, and are typically provided through the Secondary Audio Programming channel.

*This FCC glossary is also available online at [www.fcc.gov/glossary.html](http://www.fcc.gov/glossary.html)*

## FCC CONTACT INFORMATION

### Federal Communications Commission

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### FCC Bureaus:

#### **Consumer & Governmental Affairs:**

[www.fcc.gov/cgb](http://www.fcc.gov/cgb); (202) 418-1400

#### **Enforcement:**

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#### **International:**

[www.fcc.gov/ib](http://www.fcc.gov/ib); (202) 418-0437

#### **Media:**

[www.fcc.gov/mb](http://www.fcc.gov/mb); (202) 418-7200

#### **Wireless Telecommunications:**

[wireless.fcc.gov](http://wireless.fcc.gov); (202) 418-0600

#### **Wireline Competition:**

[www.fcc.gov/wcb](http://www.fcc.gov/wcb); (202) 418-1500

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